

RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.

Application Serial Number: 10/590,579
Source: IFWP
Date Processed by STIC: 9/1/06

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 09/01/2006

PATENT APPLICATION: US/10/590,579

TIME: 11:48:45

Input Set : A:\21491Y PCT.TXT

Output Set: N:\CRF4\09012006\J590579.raw

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4 <110> APPLICANT: Merck & Co., Inc.
6 <120> TITLE OF INVENTION: POLYPEPTIDES FOR INDUCING A PROTECTIVE
7   IMMUNE RESPONSE AGAINST STAPHYLOCOCCUS AUREUS
10 <130> FILE REFERENCE: 21491Y PCT
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/590,579
C--> 12 <141> CURRENT FILING DATE: 2006-08-22
12 <150> PRIOR APPLICATION NUMBER: 60/548,660
13 <151> PRIOR FILING DATE: 2004-02-27
15 <160> NUMBER OF SEQ ID NOS: 9
17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
19 <210> SEQ ID NO: 1
20 <211> LENGTH: 189
21 <212> TYPE: PRT
22 <213> ORGANISM: Artificial Sequence
24 <220> FEATURE:
25 <223> OTHER INFORMATION: truncated derivative of ORF0594
27 <400> SEQUENCE: 1
28 Arg Thr Asp Leu Lys Gly Ser Glu Phe Thr Phe Thr Pro Glu Ala Pro
29   1           5           10           15
30 Lys Thr Ile Thr Glu Leu Glu Lys Lys Val Glu Glu Ile Pro Phe Lys
31   20           25           30
32 Lys Glu Arg Lys Phe Asn Pro Asp Leu Ala Pro Gly Thr Glu Lys Val
33   35           40           45
34 Thr Arg Glu Gly Gln Lys Gly Glu Lys Thr Ile Thr Thr Pro Thr Leu
35   50           55           60
36 Lys Asn Pro Leu Thr Gly Val Ile Ile Ser Lys Gly Glu Pro Lys Glu
37 65           70           75           80
38 Glu Ile Thr Lys Asp Pro Ile Asn Glu Leu Thr Glu Tyr Gly Pro Glu
39   85           90           95
40 Thr Ile Ala Pro Gly His Arg Asp Glu Phe Asp Pro Lys Leu Pro Thr
41   100          105          110
42 Gly Glu Lys Glu Glu Val Pro Gly Lys Pro Gly Ile Lys Asn Pro Glu
43   115          120          125
44 Thr Gly Asp Val Val Arg Pro Pro Val Asp Ser Val Thr Lys Tyr Gly
45   130          135          140
46 Pro Val Lys Gly Asp Ser Ile Val Glu Lys Glu Glu Ile Pro Phe Glu
47 145          150          155          160
48 Lys Glu Arg Lys Phe Asn Pro Asp Leu Ala Pro Gly Thr Glu Lys Val
49   165          170          175
50 Thr Arg Glu Gly Gln Lys Gly Glu Lys Thr Ile Thr Thr
51   180          185
54 <210> SEQ ID NO: 2
55 <211> LENGTH: 235

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56 <212> TYPE: PRT

57 <213> ORGANISM: Artificial Sequence

59 <220> FEATURE:

60 <223> OTHER INFORMATION: His-tagged derivative of SEQ ID NO: 1

62 <400> SEQUENCE: 2

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63 Met His His His His His His Ser Ser Gly Leu Val Pro Arg Gly Ser
64 1          5          10          15
65 Gly Met Lys Glu Thr Ala Ala Ala Lys Phe Glu Arg Gln His Met Asp
66          20          25          30
67 Ser Pro Asp Leu Gly Thr Asp Asp Asp Asp Lys Ala Met Gly Arg Thr
68          35          40          45
69 Asp Leu Lys Gly Ser Glu Phe Thr Phe Thr Pro Glu Ala Pro Lys Thr
70          50          55          60
71 Ile Thr Glu Leu Glu Lys Lys Val Glu Glu Ile Pro Phe Lys Lys Glu
72 65          70          75          80
73 Arg Lys Phe Asn Pro Asp Leu Ala Pro Gly Thr Glu Lys Val Thr Arg
74          85          90          95
75 Glu Gly Gln Lys Gly Glu Lys Thr Ile Thr Thr Pro Thr Leu Lys Asn
76          100          105          110
77 Pro Leu Thr Gly Val Ile Ile Ser Lys Gly Glu Pro Lys Glu Glu Ile
78          115          120          125
79 Thr Lys Asp Pro Ile Asn Glu Leu Thr Glu Tyr Gly Pro Glu Thr Ile
80          130          135          140
81 Ala Pro Gly His Arg Asp Glu Phe Asp Pro Lys Leu Pro Thr Gly Glu
82 145          150          155          160
83 Lys Glu Glu Val Pro Gly Lys Pro Gly Ile Lys Asn Pro Glu Thr Gly
84          165          170          175
85 Asp Val Val Arg Pro Pro Val Asp Ser Val Thr Lys Tyr Gly Pro Val
86          180          185          190
87 Lys Gly Asp Ser Ile Val Glu Lys Glu Glu Ile Pro Phe Glu Lys Glu
88          195          200          205
89 Arg Lys Phe Asn Pro Asp Leu Ala Pro Gly Thr Glu Lys Val Thr Arg
90          210          215          220
91 Glu Gly Gln Lys Gly Glu Lys Thr Ile Thr Thr
92 225          230          235

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95 <210> SEQ ID NO: 3

96 <211> LENGTH: 1240

97 <212> TYPE: PRT

98 <213> ORGANISM: S. aureus

100 <400> SEQUENCE: 3

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101 Met Arg Asp Lys Lys Gly Pro Val Asn Lys Arg Val Asp Phe Leu Ser
102 1          5          10          15
103 Asn Lys Leu Asn Lys Tyr Ser Ile Arg Lys Phe Thr Val Gly Thr Ala
104          20          25          30
105 Ser Ile Leu Ile Gly Ser Leu Met Tyr Leu Gly Thr Gln Gln Glu Ala
106          35          40          45
107 Glu Ala Ala Glu Asn Asn Ile Glu Asn Pro Thr Thr Leu Lys Asp Asn
108          50          55          60
109 Val Gln Ser Lys Glu Val Lys Ile Glu Glu Val Thr Asn Lys Asp Thr

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110 65          70          75          80
111 Ala Pro Gln Gly Val Glu Ala Lys Ser Glu Val Thr Ser Asn Lys Asp
112          85          90          95
113 Thr Ile Glu His Glu Pro Ser Val Lys Ala Glu Asp Ile Ser Lys Lys
114          100          105          110
115 Glu Asp Thr Pro Lys Glu Val Ala Asp Val Ala Glu Val Gln Pro Lys
116          115          120          125
117 Ser Ser Val Thr His Asn Ala Glu Thr Pro Lys Val Arg Lys Ala Arg
118          130          135          140
119 Ser Val Asp Glu Gly Ser Phe Asp Ile Thr Arg Asp Ser Lys Asn Val
120 145          150          155          160
121 Val Glu Ser Thr Pro Ile Thr Ile Gln Gly Lys Glu His Phe Glu Gly
122          165          170          175
123 Tyr Gly Ser Val Asp Ile Gln Lys Lys Pro Thr Asp Leu Gly Val Ser
124          180          185          190
125 Glu Val Thr Arg Phe Asn Val Gly Asn Glu Ser Asn Gly Leu Ile Gly
126          195          200          205
127 Ala Leu Gln Leu Lys Asn Lys Ile Asp Phe Ser Lys Asp Phe Asn Phe
128          210          215          220
129 Lys Val Arg Val Ala Asn Asn His Gln Ser Asn Thr Thr Gly Ala Asp
130 225          230          235          240
131 Gly Trp Gly Phe Leu Phe Ser Lys Gly Asn Ala Glu Glu Tyr Leu Thr
132          245          250          255
133 Asn Gly Gly Ile Leu Gly Asp Lys Gly Leu Val Asn Ser Gly Gly Phe
134          260          265          270
135 Lys Ile Asp Thr Gly Tyr Ile Tyr Thr Ser Ser Met Asp Lys Thr Glu
136          275          280          285
137 Lys Gln Ala Gly Gln Gly Tyr Arg Gly Tyr Gly Ala Phe Val Lys Asn
138          290          295          300
139 Asp Ser Ser Gly Asn Ser Gln Met Val Gly Glu Asn Ile Asp Lys Ser
140 305          310          315          320
141 Lys Thr Asn Phe Leu Asn Tyr Ala Asp Asn Ser Thr Asn Thr Ser Asp
142          325          330          335
143 Gly Lys Phe His Gly Gln Arg Leu Asn Asp Val Ile Leu Thr Tyr Val
144          340          345          350
145 Ala Ser Thr Gly Lys Met Arg Ala Glu Tyr Ala Gly Lys Thr Trp Glu
146          355          360          365
147 Thr Ser Ile Thr Asp Leu Gly Leu Ser Lys Asn Gln Ala Tyr Asn Phe
148          370          375          380
149 Leu Ile Thr Ser Ser Gln Arg Trp Gly Leu Asn Gln Gly Ile Asn Ala
150 385          390          395          400
151 Asn Gly Trp Met Arg Thr Asp Leu Lys Gly Ser Glu Phe Thr Phe Thr
152          405          410          415
153 Pro Glu Ala Pro Lys Thr Ile Thr Glu Leu Glu Lys Lys Val Glu Glu
154          420          425          430
155 Ile Pro Phe Lys Lys Glu Arg Lys Phe Asn Pro Asp Leu Ala Pro Gly
156          435          440          445
157 Thr Glu Lys Val Thr Arg Glu Gly Gln Lys Gly Glu Lys Thr Ile Thr
158          450          455          460

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159 Thr Pro Thr Leu Lys Asn Pro Leu Thr Gly Val Ile Ile Ser Lys Gly
160 465 470 475 480
161 Glu Pro Lys Glu Glu Ile Thr Lys Asp Pro Ile Asn Glu Leu Thr Glu
162 485 490 495
163 Tyr Gly Pro Glu Thr Ile Ala Pro Gly His Arg Asp Glu Phe Asp Pro
164 500 505 510
165 Lys Leu Pro Thr Gly Glu Lys Glu Glu Val Pro Gly Lys Pro Gly Ile
166 515 520 525
167 Lys Asn Pro Glu Thr Gly Asp Val Val Arg Pro Pro Val Asp Ser Val
168 530 535 540
169 Thr Lys Tyr Gly Pro Val Lys Gly Asp Ser Ile Val Glu Lys Glu Glu
170 545 550 555 560
171 Ile Pro Phe Glu Lys Glu Arg Lys Phe Asn Pro Asp Leu Ala Pro Gly
172 565 570 575
173 Thr Glu Lys Val Thr Arg Glu Gly Gln Lys Gly Glu Lys Thr Ile Thr
174 580 585 590
175 Thr Pro Thr Leu Lys Asn Pro Leu Thr Gly Val Ile Ile Ser Lys Gly
176 595 600 605
177 Glu Pro Lys Glu Glu Ile Thr Lys Asp Pro Ile Asn Glu Leu Thr Glu
178 610 615 620
179 Tyr Gly Pro Glu Thr Ile Thr Pro Gly His Arg Asp Glu Phe Asp Pro
180 625 630 635 640
181 Lys Leu Pro Thr Gly Glu Lys Glu Glu Val Pro Gly Lys Pro Gly Ile
182 645 650 655
183 Lys Asn Pro Glu Thr Gly Asp Val Val Arg Pro Pro Val Asp Ser Val
184 660 665 670
185 Thr Lys Tyr Gly Pro Val Lys Gly Asp Ser Ile Val Glu Lys Glu Glu
186 675 680 685
187 Ile Pro Phe Lys Lys Glu Arg Lys Phe Asn Pro Asp Leu Ala Pro Gly
188 690 695 700
189 Thr Glu Lys Val Thr Arg Glu Gly Gln Lys Gly Glu Lys Thr Ile Thr
190 705 710 715 720
191 Thr Pro Thr Leu Lys Asn Pro Leu Thr Gly Glu Ile Ile Ser Lys Gly
192 725 730 735
193 Glu Ser Lys Glu Glu Ile Thr Lys Asp Pro Ile Asn Glu Leu Thr Glu
194 740 745 750
195 Tyr Gly Pro Glu Thr Ile Thr Pro Gly His Arg Asp Glu Phe Asp Pro
196 755 760 765
197 Lys Leu Pro Thr Gly Glu Lys Glu Glu Val Pro Gly Lys Pro Gly Ile
198 770 775 780
199 Lys Asn Pro Glu Thr Gly Asp Val Val Arg Pro Pro Val Asp Ser Val
200 785 790 795 800
201 Thr Lys Tyr Gly Pro Val Lys Gly Asp Ser Ile Val Glu Lys Glu Glu
202 805 810 815
203 Ile Pro Phe Lys Lys Glu Arg Lys Phe Asn Pro Asp Leu Ala Pro Gly
204 820 825 830
205 Thr Glu Lys Val Thr Arg Glu Gly Gln Lys Gly Glu Lys Thr Ile Thr
206 835 840 845
207 Thr Pro Thr Leu Lys Asn Pro Leu Thr Gly Glu Ile Ile Ser Lys Gly

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208	850		855		860											
209	Glu	Ser	Lys	Glu	Glu	Ile	Thr	Lys	Asp	Pro	Ile	Asn	Glu	Leu	Thr	Glu
210	865					870					875				880	
211	Tyr	Gly	Pro	Glu	Thr	Ile	Thr	Pro	Gly	His	Arg	Asp	Glu	Phe	Asp	Pro
212						885				890					895	
213	Lys	Leu	Pro	Thr	Gly	Glu	Lys	Glu	Glu	Val	Pro	Gly	Lys	Pro	Gly	Ile
214				900					905					910		
215	Lys	Asn	Pro	Glu	Thr	Gly	Asp	Val	Val	Arg	Pro	Pro	Val	Asp	Ser	Val
216			915					920					925			
217	Thr	Lys	Tyr	Gly	Pro	Val	Lys	Gly	Asp	Ser	Ile	Val	Glu	Lys	Glu	Glu
218	930						935					940				
219	Ile	Pro	Phe	Glu	Lys	Glu	Arg	Lys	Phe	Asn	Pro	Asp	Leu	Ala	Pro	Gly
220	945					950					955				960	
221	Thr	Glu	Lys	Val	Thr	Arg	Glu	Gly	Gln	Lys	Gly	Glu	Lys	Thr	Ile	Thr
222					965					970					975	
223	Thr	Pro	Thr	Leu	Lys	Asn	Pro	Leu	Thr	Gly	Glu	Ile	Ile	Ser	Lys	Gly
224			980						985				990			
225	Glu	Ser	Lys	Glu	Glu	Ile	Thr	Lys	Asp	Pro	Val	Asn	Glu	Leu	Thr	Glu
226			995					1000				1005				
227	Phe	Gly	Gly	Glu	Lys	Ile	Pro	Gln	Gly	His	Lys	Asp	Ile	Phe	Asp	Pro
228	1010						1015					1020				
229	Asn	Leu	Pro	Thr	Asp	Gln	Thr	Glu	Lys	Val	Pro	Gly	Lys	Pro	Gly	Ile
230	1025					1030					1035				1040	
231	Lys	Asn	Pro	Asp	Thr	Gly	Lys	Val	Ile	Glu	Glu	Pro	Val	Asp	Asp	Val
232					1045					1050				1055		
233	Ile	Lys	His	Gly	Pro	Lys	Thr	Gly	Thr	Pro	Glu	Thr	Lys	Thr	Val	Glu
234			1060						1065				1070			
235	Ile	Pro	Phe	Glu	Thr	Lys	Arg	Glu	Phe	Asn	Pro	Lys	Leu	Gln	Pro	Gly
236			1075					1080				1085				
237	Glu	Glu	Arg	Val	Lys	Gln	Glu	Gly	Gln	Pro	Gly	Ser	Lys	Thr	Ile	Thr
238	1090					1095					1100					
239	Thr	Pro	Ile	Thr	Val	Asn	Pro	Leu	Thr	Gly	Glu	Lys	Val	Gly	Glu	Gly
240	1105					1110					1115				1120	
241	Gln	Pro	Thr	Glu	Glu	Ile	Thr	Lys	Gln	Pro	Val	Asp	Lys	Ile	Val	Glu
242				1125						1130				1135		
243	Phe	Gly	Gly	Glu	Lys	Pro	Lys	Asp	Pro	Lys	Gly	Pro	Glu	Asn	Pro	Glu
244			1140						1145				1150			
245	Lys	Pro	Ser	Arg	Pro	Thr	His	Pro	Ser	Gly	Pro	Val	Asn	Pro	Asn	Asn
246			1155					1160				1165				
247	Pro	Gly	Leu	Ser	Lys	Asp	Arg	Ala	Lys	Pro	Asn	Gly	Pro	Val	His	Ser
248	1170					1175					1180					
249	Met	Asp	Lys	Asn	Asp	Lys	Val	Lys	Lys	Ser	Lys	Ile	Ala	Lys	Glu	Ser
250	1185					1190					1195				1200	
251	Val	Ala	Asn	Gln	Glu	Lys	Lys	Arg	Ala	Glu	Leu	Pro	Lys	Thr	Gly	Leu
252				1205						1210				1215		
253	Glu	Ser	Thr	Gln	Lys	Gly	Leu	Ile	Phe	Ser	Ser	Ile	Ile	Gly	Ile	Ala
254				1220					1225					1230		
255	Gly	Leu	Met	Leu	Leu	Ala	Arg	Arg								
256			1235					1240								

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/590,579

DATE: 09/01/2006

TIME: 11:48:46

Input Set : A:\21491Y PCT.TXT

Output Set: N:\CRF4\09012006\J590579.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date